

CLAIMS

What is claimed is:

1. An oil pan assembly, comprising:
 - a) an engine component having an associated first mating
 - 5 surface;
 - b) a molded plastic oil pan having an associated second mating
 - surface; and
 - c) an adhesive in contact with said first mating surface and said
 - second mating surface for joining said first component and said second oil pan to define an
 - 10 oil pan assembly, wherein the resulting joint has a strength greater than the strength of said
 - molded plastic oil pan.
2. The assembly of Claim 1, wherein said first mating surface and said
- second mating surface are generally planar.
3. The assembly of Claim 1, wherein said oil pan is a blend of a polyamide
- 15 and a syndiotactic polystyrene.
4. The assembly of Claim 1, wherein said oil pan is an injection molded
- filled plastic blend of nylon 6,6 and syndiotactic polystyrene.
5. The assembly of Claim 1, wherein said joint is substantially free of a
- sealing gasket.
- 20 6. The assembly of Claim 1, wherein said joint is substantially free of
- mechanical fasteners.
7. The assembly of Claim 1, wherein a primer contacts said adhesive.
8. The assembly of Claim 1, wherein substantially the entirety of the first
- and second mating surfaces in contact with said adhesive is capable of bonding thereto.

9. An automotive oil pan assembly, comprising:

- a) a metal engine having an associated first mating surface;
- b) a molded thermoplastic oil pan having an associated second

5 mating surface; and

- c) an epoxy adhesive in contact with said first mating surface and said second mating surface for joining said engine block to said oil pan to define an automotive vehicle oil pan assembly.

10 10. The assembly of Claim 9, wherein said first mating surface and said second mating surface are generally planar.

11. The assembly of Claim 9, wherein said oil pan is a blend of a polyamide and a syndiotactic polystyrene.

12. The assembly of Claim 9, wherein said oil pan is injection molded filled plastic blends of nylon and syndiotactic polystyrene.

15 13. The assembly of Claim 9, wherein said joint is substantially free of a sealing gasket.

14. The assembly of Claim 9, wherein said joint is substantially free of mechanical fasteners.

20 15. The assembly of Claim 9, wherein said joint is continuous between said first mating surface and said second mating surface.

16. The assembly of Claim 15, wherein a primer contacts said adhesive.

17. The assembly of Claim 9, wherein substantially the entirety of the first and second mating surfaces in contact with said adhesive is capable of bonding thereto.